Ocean & Society Survey
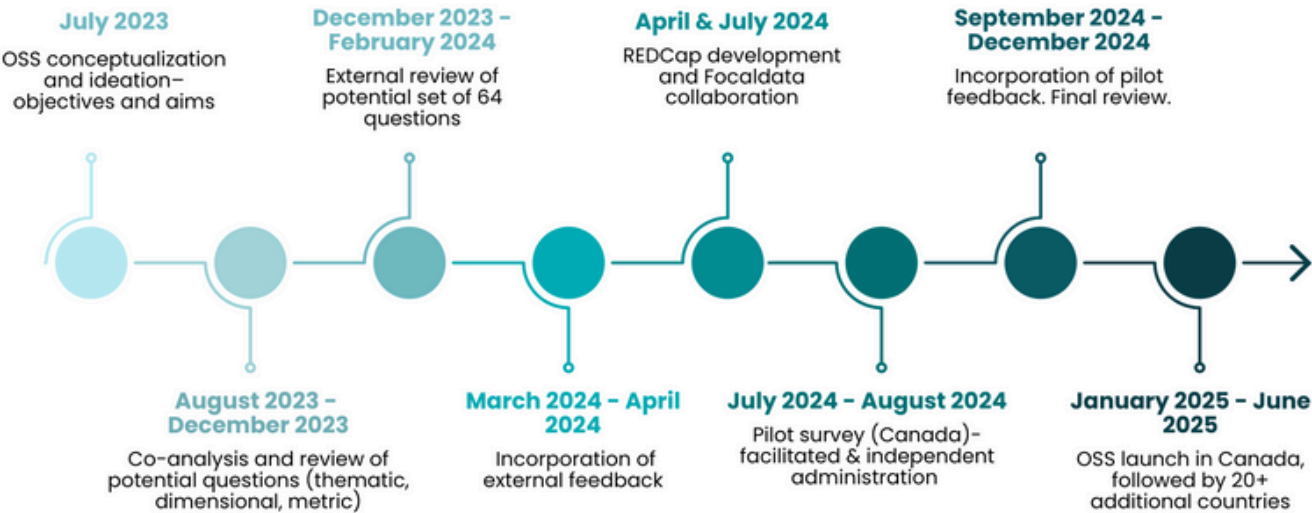# **Co-design process**

Rationale & objectives

The OSS is the culmination of 18 months of collaboration by an international and multi-sectoral team of researchers and partners from the Global North and South. Its primary objective is to better understand and utilize public insights about people-ocean connections, specifically on how we understand, value, and/or engage with the ocean, to help inform people-centred and solution-focused ocean campaigns, engagement initiatives, decision-making, and investments.

To achieve this objective, 20 standardized questions focus on connections with the ocean related to emotions, lifestyle choices, willingness to change habits and behaviours, awareness of ocean benefits, access to the ocean, sources of information about the ocean, perceived ocean threats and concerns, and place-based perspectives on personal and collective actions and solutions.

OCEAN & SOCIETY SURVEY TIMELINE

July 2023
OSS conceptualization and ideation–objectives and aims

December 2023 – February 2024
External review of potential set of 64 questions

April & July 2024
REDCap development and Focaldata collaboration

September 2024 – December 2024
Incorporation of pilot feedback. Final review.

August 2023 – December 2023
Co-analysis and review of potential questions (thematic, dimensional, metric)

March 2024 – April 2024
Incorporation of external feedback

July 2024 – August 2024
Pilot survey (Canada)-facilitated & independent administration

January 2025 – June 2025
OSS launch in Canada, followed by 20+ additional countries

Co-development of a robust tool

- The OSS arose from the efforts of a co-design team of ocean literacy researchers and strategic ocean communicators from North America, South America, and Europe. Its development built upon three existing, validated national ocean literacy surveys:
- Canadian Ocean Literacy Survey (Canadian Ocean Literacy Coalition, 2020)
- United Kingdom Ocean Literacy Survey (Department for Environment, Food & Rural Affairs and Ocean Conservation Trust, 2022)
- Brazil Ocean Literacy Survey (Instituto do Mar–Universidade Federal de São Paulo and Fundação Grupo Boticário, 2022)

The comparative analysis of these 3 national surveys informed the OSS, importantly reflecting the ways ocean literacy includes and values diverse ocean perspectives: Canada's survey examined ocean perceptions and values through place-based perspectives and multiple ways of knowing, the UK's survey focused on the measurement of key ocean literacy dimensions, and Brazil's survey focused on ocean culture and communication.

The selection of core OSS questions was guided by a public ocean perceptions comparative analysis study by the Canadian Ocean Literacy Coalition in 2022 (McRuer & Glithero, 2025), and involved the following three stages:

1. Identifying arising themes in question sets

Ocean Connection	Reciprocal influences (actual or perceived) between people and the ocean; or references to the physical, emotional, spiritual relationship(s) with the ocean
Ocean Health	Perceptions of ocean health, its importance to daily lives, ocean health priorities, and objectives
Ocean Protection	Ocean protection awareness, priorities, strategies, and leadership
Ocean Threats	Awareness and concerns related to ocean threats (actual or perceived)
Ocean Values	Ocean values related to daily lives, resources, protection, economics, governance
Knowledge/Awareness	Understanding of the ocean and how information is sourced, taken up, and shared
Blue Economy	Perceptions and understanding related to ocean-based economic activities, assets, growth, and services
Governance	Perceptions related to processes of enforcement/modification related to ocean and coastal activities, health, and protection
Ocean Influences & Solutions	Actions, influences, and innovation to support a healthy ocean

2. **Assigning ocean literacy dimension(s) to each question.** Adapted from McKinley et al., 2023.
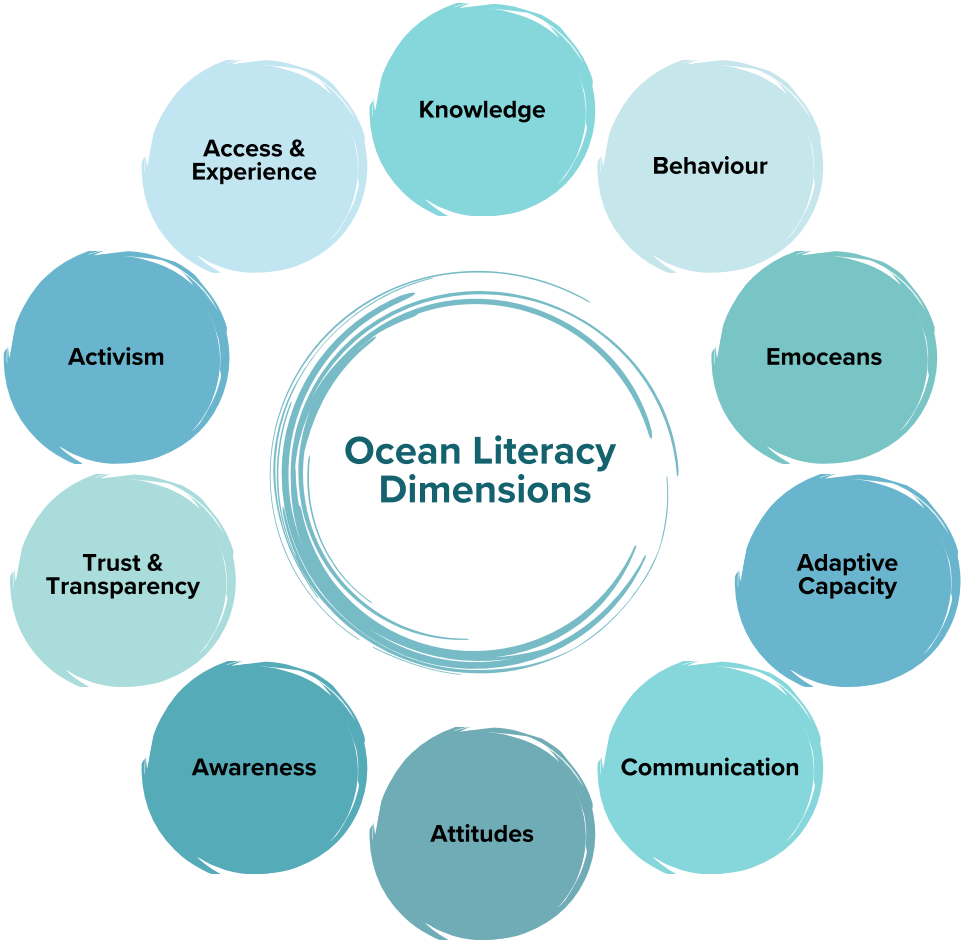
3. **Assessing question alignment with indicators of change(s) over time.** Adapted from Hattam et al., 2015.

Measurability	Will data result in something that can be measured?
Sensitivity	Can data reflect change over time?
Specificity	Is the change resulting from a response to a particular ocean literacy dimension or specific to a particular topic?
Scalability	Is the data adaptive to different scales?
Transferability	Is the question applicable across regions?
Policy Relevance	Is the resultant data impactful for policy?

Multiple rounds of revisions by the OSS team determined 64 potential questions relevant to a wide range of audiences and contexts. Review processes involved 30 additional collaborators before a pilot stage in Canada (June-August 2024) served to test the questions, platform, and design prior to international uptake and use. In particular, the pilot stage helped with data cleaning and quality checks, and provided insight on metrics of survey fatigue, language uncertainty, inconsistent responses, lack of attention, and time to completion. Following review and pilot stages, the potential set of 64 questions was refined to 20 core, standardized questions (in addition to 10 demographic questions) primarily consisting of open, ranking, likert, multiple select, and single select formats. (N.B. to aid in inclusivity and accessibility on a global scale, the core set can be augmented to afford context-specific, place-based, and culturally appropriate questions - see section on OSS contextualization).

References

- Hattam, C., Atkins, J. P., Beaumont, N., Börger, T., Böhnke-Henrichs, A., Burdon, D., ... & Austen, M. C. (2015). Marine ecosystem services: linking indicators to their classification. Ecological Indicators, 49, 61-75.;
- McKinley, E., Burdon, D., & Shellock, R. J. (2023). The evolution of ocean literacy: A new framework for the United Nations Ocean Decade and beyond. Marine Pollution Bulletin, 186, 114467.
- McRuer, J., & Glithero, D. L. (2025). Advancing Public Perceptions Ocean Research: A Guiding Approach to Strengthen Collaboration for Ocean Health. Facets. 10.1139/facets-2024-0039